STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene
201 W. Preston Street • Baltimore, Maryland 21201
Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

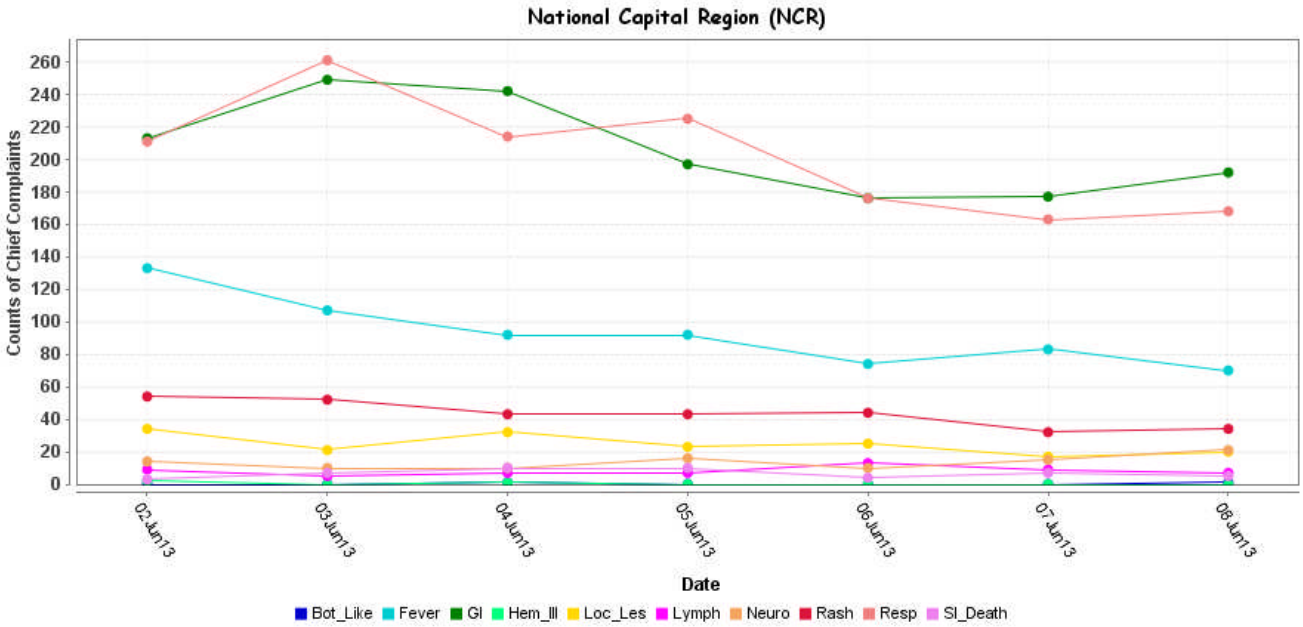
June 14, 2013

Public Health & Emergency Preparedness Bulletin: # 2013:23
Reporting for the week ending 06/08/13 (MMWR Week #23)

CURRENT HOMELAND SECURITY THREAT LEVELS

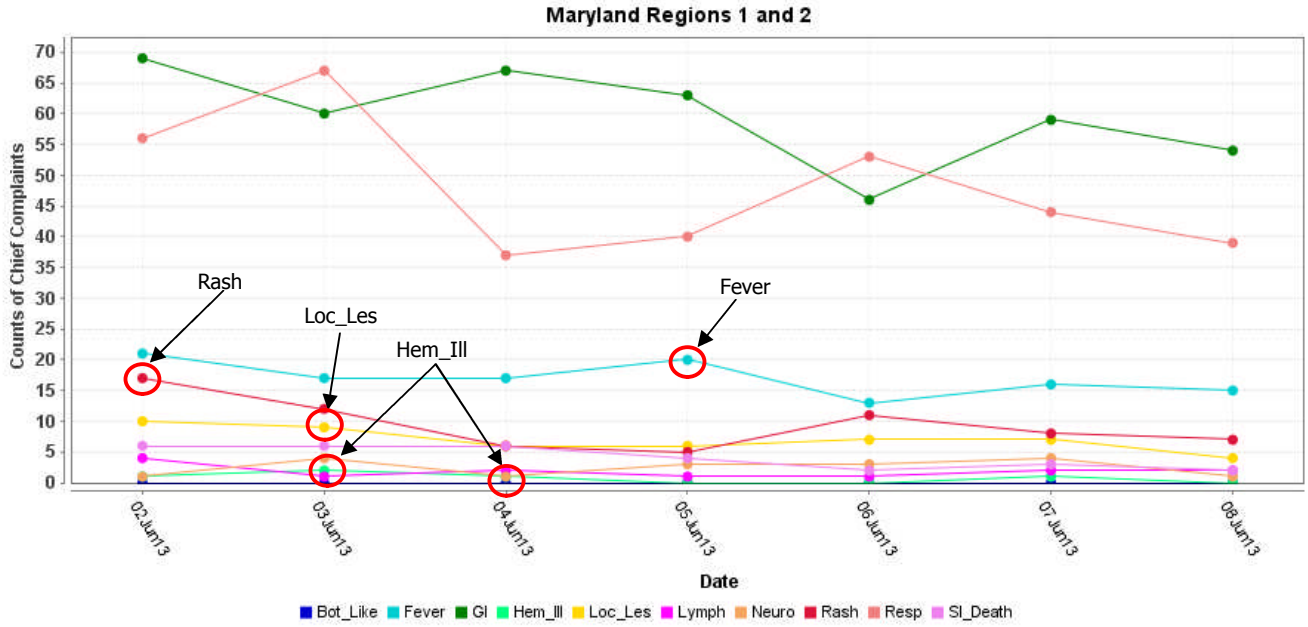
National: **No Active Alerts**
Maryland: **Level One (MEMA status)**

SYNDROMIC SURVEILLANCE REPORTS
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

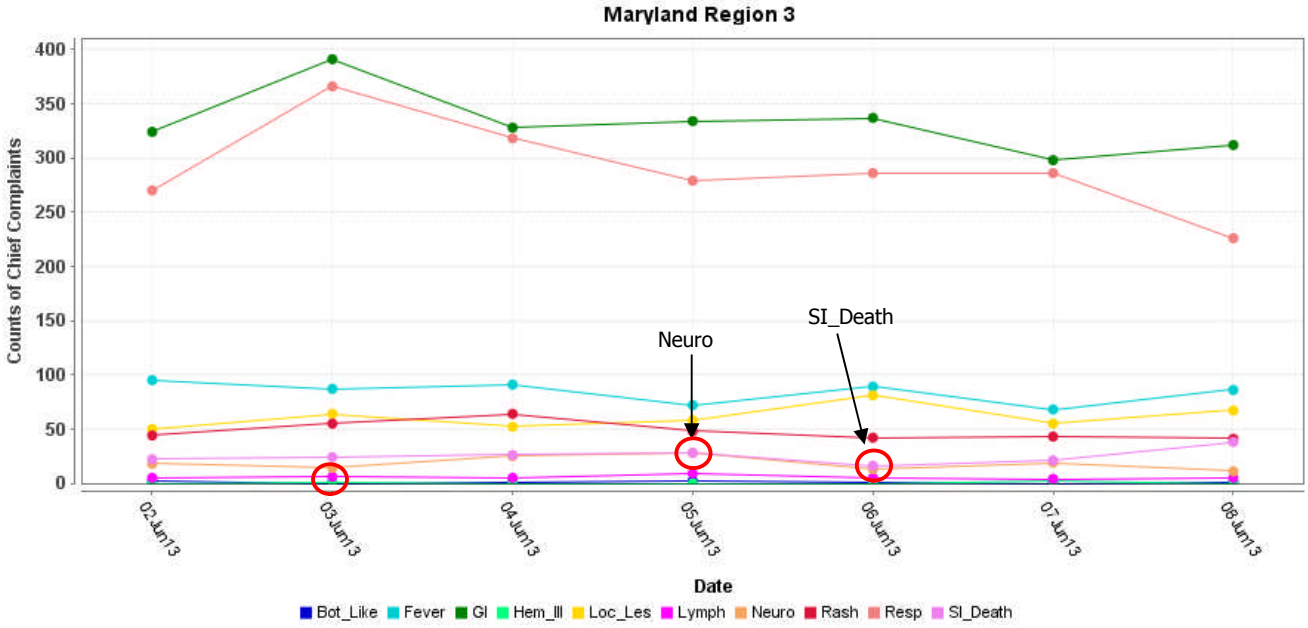


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

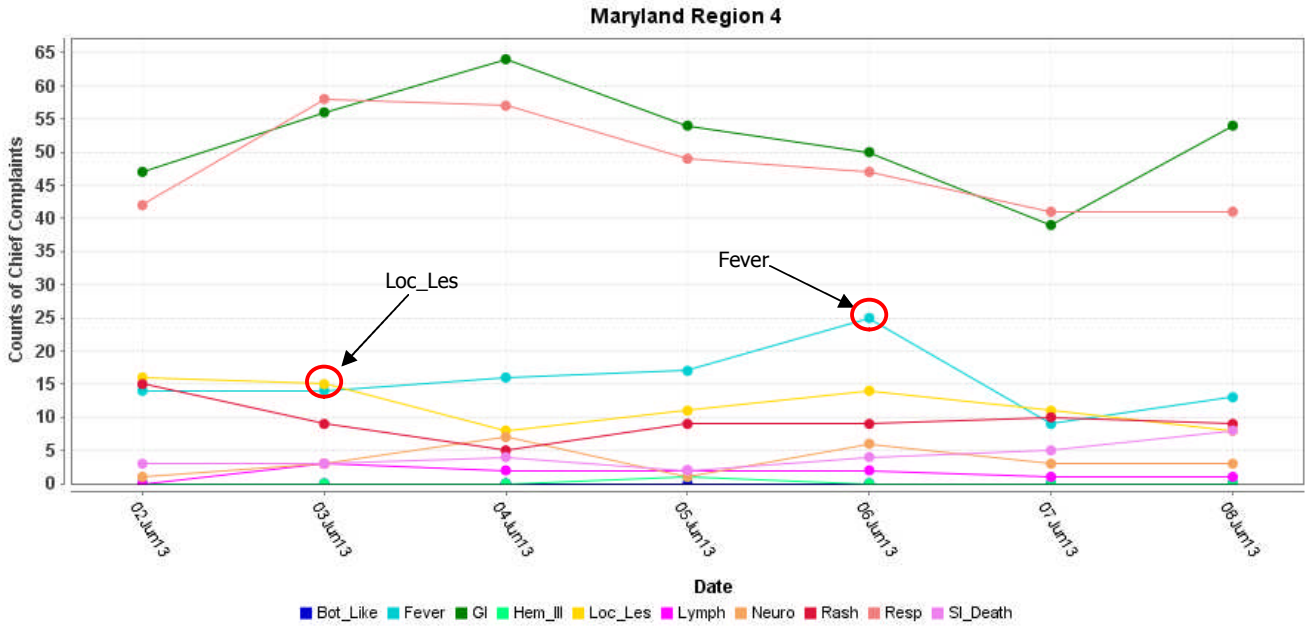
MARYLAND ESSENCE:



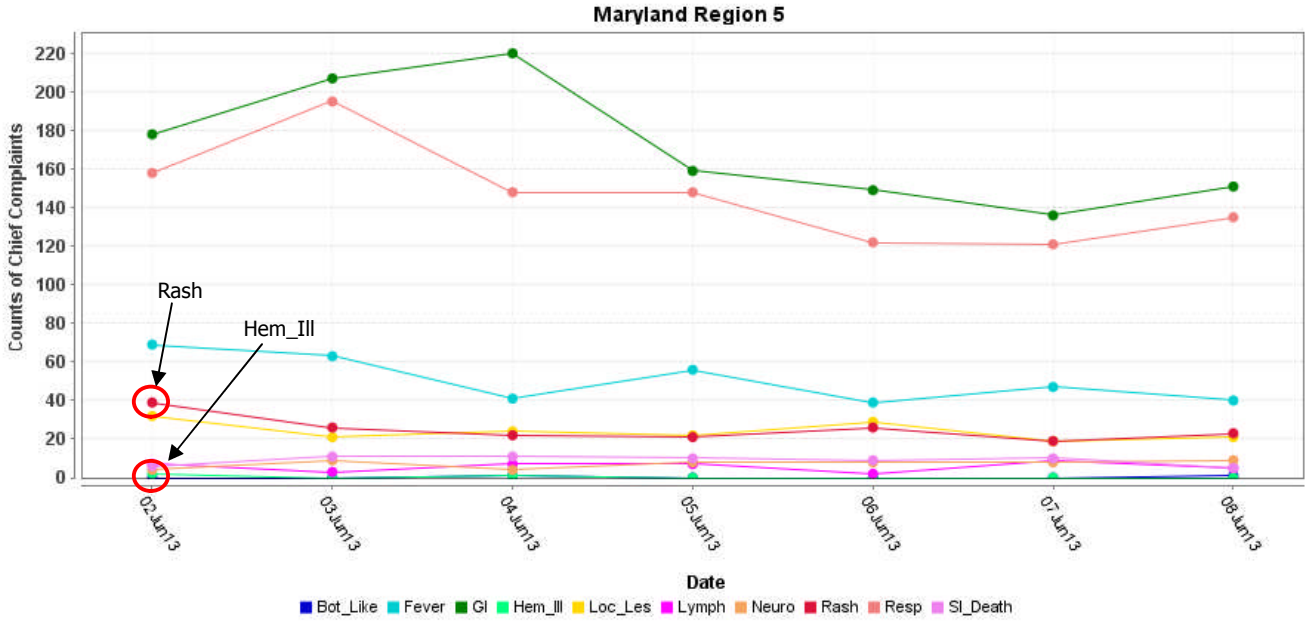
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



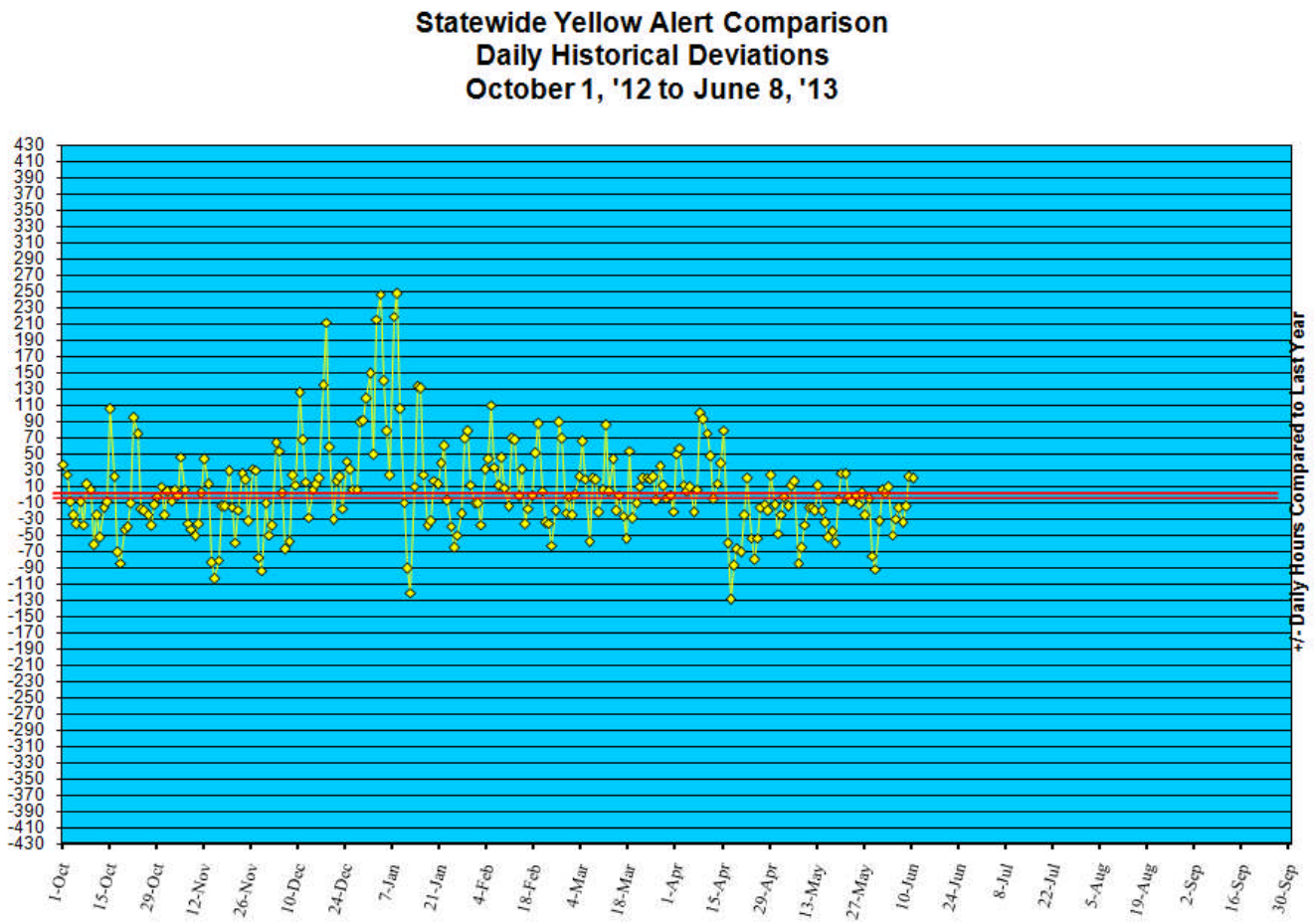
* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/11.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in May 2013 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (June 2 – June 8, 2013):	7	0
Prior week (May 26 – June 1, 2013):	7	0
Week#23, 2012 (June 4 – June 10, 2012):	3	0

5 outbreaks were reported to DHMH during MMWR Week 23 (June 2 – June 8, 2013)

3 Foodborne Outbreaks
3 outbreaks of GASTROENTERITIS/FOODBORNE associated with Private Homes.

2 Respiratory Illness Outbreaks
1 outbreak of PNEUMONIA in a Nursing Home
1 outbreak of PNEUMONIA in a Shelter

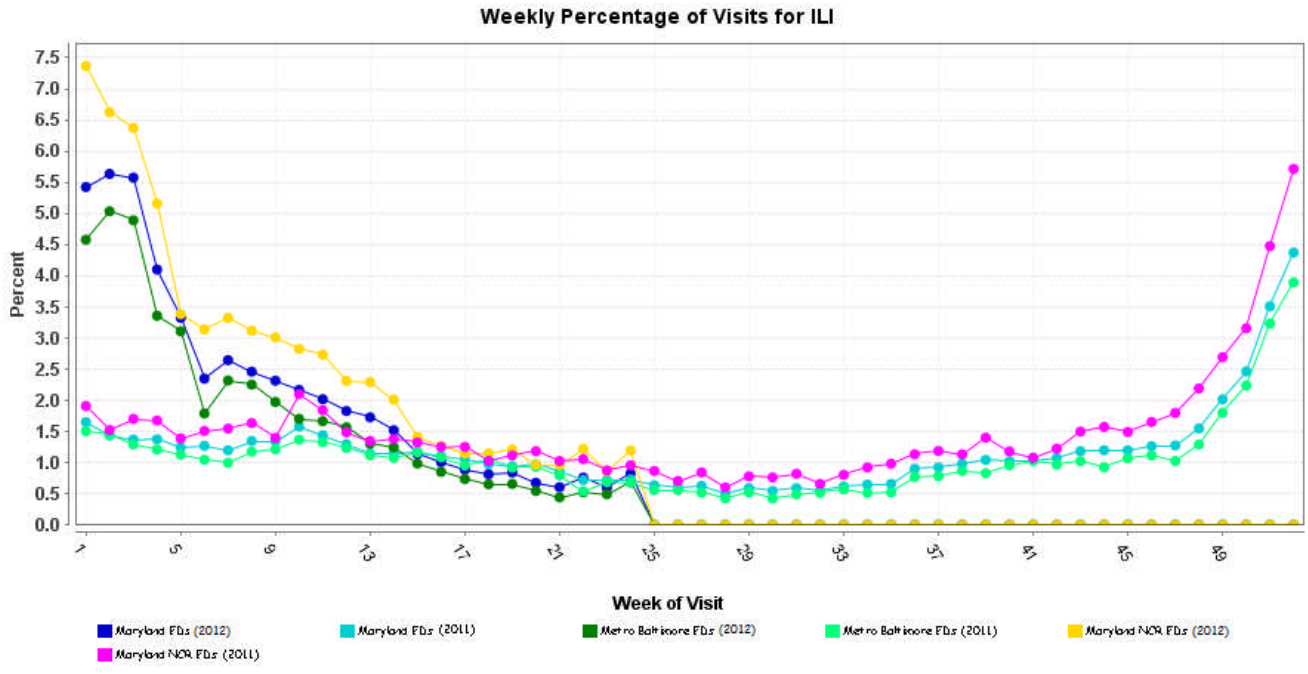
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May.

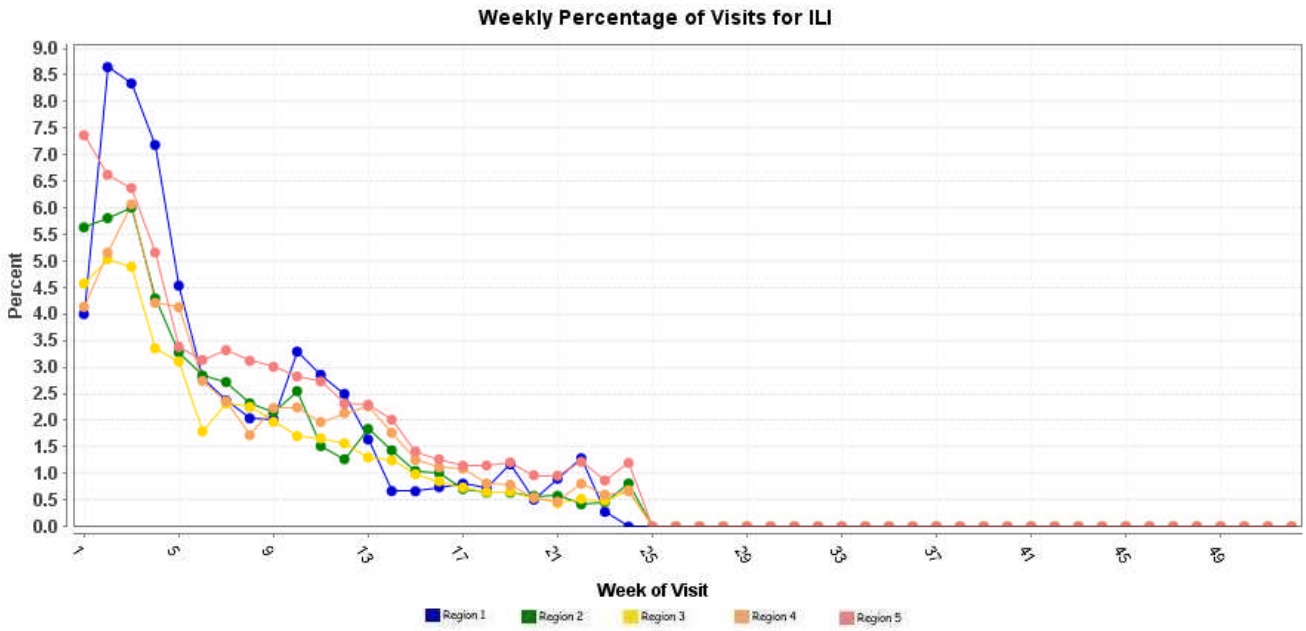
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



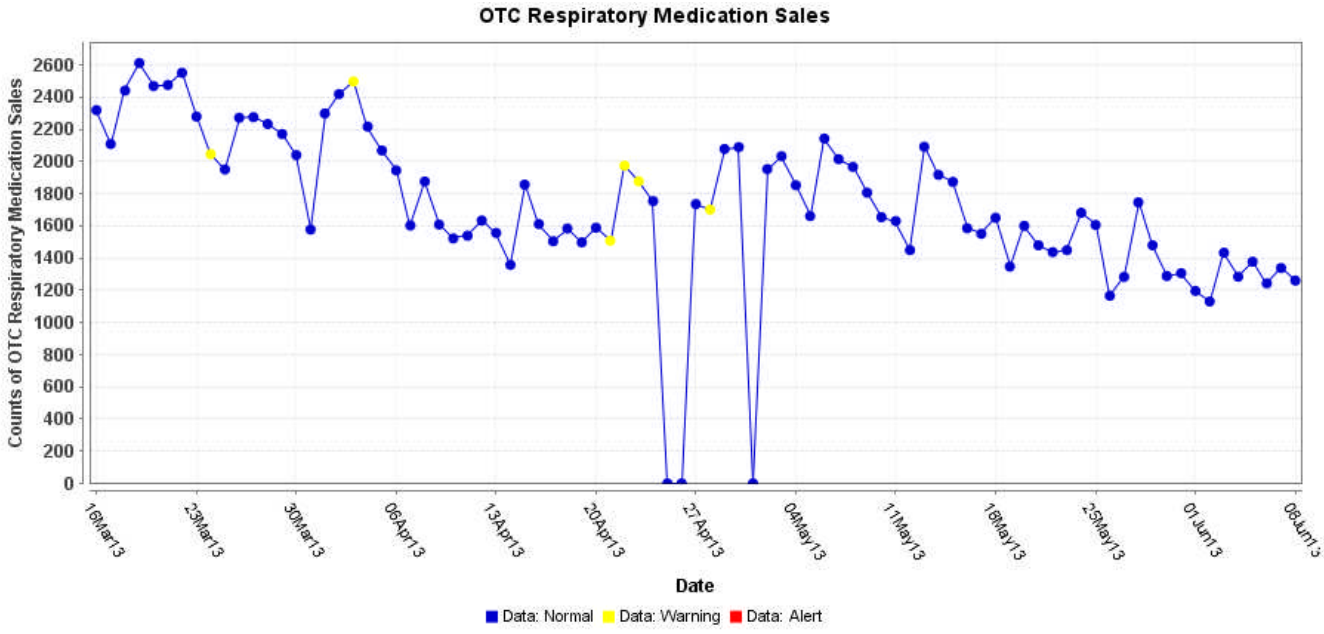
* Includes 2012 and 2013 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2013 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is 3. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic. As of June 4, 2013, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 630, of which 375 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 60%.

NATIONAL DISEASE REPORTS*

SALMONELLOSIS (USA): 6 June 2013, A total of 224 persons infected with the outbreak strain of *Salmonella Typhimurium* have been reported from 34 states. The number of ill persons identified in each state is as follows: Alabama (1), Arizona (5), California (6), Colorado (24), Florida (2), Georgia (3), Illinois (1), Indiana (7), Iowa (5), Kansas (13), Kentucky (1), Louisiana (6), Massachusetts (2), Minnesota (2), Mississippi (4), Missouri (16), Montana (1), Nebraska (10), Nevada (1), New Hampshire (1), New Mexico (13), New York (15), North Dakota (5), Oklahoma (9), Oregon (10), South Dakota (7), Tennessee (1), Texas (26), Utah (4), Vermont (1), Virginia (1), Washington (17), Wisconsin (2), and Wyoming (2). This outbreak of human *S. Typhimurium* infections is not related to the current outbreak of human *S. Infantis*, Lille, Newport, and Mbandaka infections linked to live poultry. Among those who reported the date they became ill, illnesses began between and 4 Mar 2013 and 20 May 2013. Ill persons range in age from less than one year to 81 years, and 62 per cent of ill persons are 10 years of age or younger. 51 per cent of ill persons are female. Among 141 ill persons with available information, 37 (26 per cent) have been hospitalized. No deaths have been reported. Epidemiologic, laboratory, and traceback findings have linked this outbreak of human *S. Typhimurium* infections to contact with chicks, ducklings, and other live baby poultry purchased from multiple feed stores and sourced from multiple mail-order hatcheries. Investigations are ongoing to determine the source of the live poultry linked to this outbreak. Always wash hands thoroughly with soap and water right after touching live poultry or anything in the area where they live and roam. Do not let live poultry inside the house. Additional recommendations are available. These recommendations are important and apply to all live poultry regardless of the age of the birds or where they were purchased. Mail-order hatcheries, agricultural feed stores, and others that sell or display chicks, ducklings, and other live poultry should provide health-related information to owners and potential purchasers of these birds prior to the point of purchase. This should include information about the risk of acquiring salmonellosis from contact with live poultry. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS*

SALMONELLOSIS (AUSTRALIA): 6 June 2013, A Victorian egg supplier is under investigation and one person has ongoing health issues following Canberra's largest salmonella outbreak, which has left health professionals "struck by the severity" of the symptoms and high infection rate. The outbreak, which affected 140 people and hospitalized 15 in mid-May 2013, was traced back to raw egg mayonnaise served at the Copa Brazilian restaurant in Dickson [Canberra]. But ACT [Australian Capital Territory] Chief Health Officer Dr Paul Kelly confirmed on Wed 5 Jun 2013, that the focus had turned to an egg producer in Victoria who supplied eggs to the Copa. "We have actually sourced the eggs back to a supplier in Victoria, and our colleagues in Victoria have commenced an investigation of that particular place," Dr Kelly said. "They've gone out to that particular farm, and there's been a veterinarian inspection. What normally happens there is that they also take some swabs and some eggs for the same sort of testing that we've done." He said the investigation into the outbreak was now looking to isolate the "molecular fingerprint" of the particular strain of salmonella using highly specialized lab work, which would then allow the authority to more definitively identify the likely source. Dr Kelly said so far results were pointing towards Typhimurium phage type 170 as the specific bacterium, and clinicians at the territory's hospitals had told ACT Health they'd never seen an outbreak with such strong symptoms. "We were really struck by the severity of the symptoms and also the high attack rate -- almost everyone that ate there got sick," Dr Kelly said. Of those treated, all patients had diarrhoea, but 94 per cent also had abdominal cramps, and 92 per cent had fever -- which Dr Kelly said was "surprisingly high" and pointed towards a very large dose of the bacterium in the food. He also confirmed that one person had presented with ongoing joint issues as a result of the salmonella. "Hopefully that will resolve. Normally it does, but sometimes it doesn't, it continues. The thing is, just on probability, the more cases you have, the more likely you're going to have these quite rare ongoing events like this," he said. At the height of the investigation, ACT Health had up to 30 people working on the case at any given time. Workers contacted 194 diners, often more than once, for interviews that could last more than 30 minutes, and also conducted inspections at the restaurant, questioned the business owners and staff, and processed a large stream of data coming in about the infection. Dr Kelly confirmed ACT Health was monitoring the Copa since it reopened about a week after the outbreak. He said the authority established a short period of increased inspections for the establishment, and so far had not discovered any issues. "They're fine. They'd done a complete refit before the incident, so there weren't any of that sort of hardware problems to fix," he said. "Really, it was just the raw eggs. I really wish people would just stop using them." Dr Kelly said of 10 food poisoning outbreaks last year [2012], half were salmonella-related, and 4 of those were traced back to raw egg products. He would like to see a national approach to combating the issue. "At the moment there's no law against using raw eggs. There is a law under the Food Act in the ACT and in other jurisdictions about ... supplying unhealthy food to people. That is a breach of the law. I would argue that supplying food that has salmonella in it is pretty unhealthy," he said. Dr Kelly said ACT Health would continue to work closely with suppliers and the ACT's 2500 food establishments to find a solution. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

LEGIONELLOSIS (AUSTRALIA): 6 June 2013, A female patient was admitted to the Wesley Hospital due to Legionnaires' disease. This is the 2nd case of Legionnaires' disease in Brisbane following the death of a 60-year-old woman last Sunday. Although a cancer patient, the elderly woman tested positive for Legionnaire's disease. The Wesley Hospital water supply tested positive for *Legionella* bacteria. In a statement released today [6 Jun 2013], Wesley Hospital said that the latest patient is confined in a different section of the hospital. The older woman stayed in a different hospital ward until her death. New hospital admissions were temporarily cancelled last night [5 Jun 2013] according to Executive Director Richard Royle of Uniting Care Health. The

emergency department of Wesley Hospital will be the holding place of all emergency cases related to the disease. Royle said the decision was made for the safety of all patients. It is a necessary precaution until the source of contamination is clearly determined. The director also said the health department would not risk the lives of patients in the hospital without knowing more about the recent Legionnaires' disease case. Hospital personnel distributed wash kits to patients, since showering was not allowed at this time. The water supply of the hospital is being disinfected by engineers. Royle says every precautionary step will be taken until the hospital hears from Queensland Health experts. An investigation will be conducted today [6 Jun 2013] by agency environmental health experts. The situation calls for a different kind of treatment, since it has never happened before. Uniting Health Care fully supports Wesley Hospital and is willing to provide the necessary resources. The hospital is the biggest not-for-profit hospital in Queensland. The hospital currently has 480 patients. Hundreds of patients were waiting for more updates since they have been alerted by hospital staff after a patient died from Legionnaires' disease. According to health experts, the likelihood of developing the disease is rare and comparable to being struck by lightning. Nevertheless, they were worried about the risks of contamination and began contacting patients who may have had contact with the bacteria at the hospital. Water samples collected 7 days before from the hospital's water supply tested positive for *Legionella* bacteria. The samples were taken after the death of the elderly cancer patient. The contamination of the hospital's water system came as a surprise. Legionnaires' disease has symptoms similar to [those of] flu, which include fever, headache, chills, fatigue, muscle pain, diarrhea and shortness of breath. The disease is triggered by a few strains of *Legionella* bacteria and may be spread via air conditioning units, showers, and other hot water sources. Patients are advised to inform the hospital if any of the symptoms are felt. The hospital awaits further announcements as more information is known about the disease. (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *non-suspect case

Q FEVER (HUNGARY): 6 June 2013, An outbreak of Q fever with multiple cases of pneumonia has occurred in Vokany [Baranya county] since 7 May 2013, which has drawn the attention of the County Government Office of Public Health. The District Institute of Public Health, in collaboration with the county health department, immediately began interviews and blood sampling of the hospitalized patients. In parallel, the government Directorate of Animal Health and Food Chain Safety also started to assess infection in sheep, goats, and cattle. Based on an epidemiological investigation the Q fever outbreak currently involves 91 patients in the Vokany region and there are 22 people hospitalized in Pecs. Patients should be treated for 2-3 weeks with doxycycline. Given the long incubation period of the infection, more cases may be expected. The source of infection is still unknown, although pathogen-infected aerosols that drifted for miles may have played a role. However, other factors must be considered. (Q Fever is listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

*National and International Disease Reports are retrieved from http://www.promedmail.org/.

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/

Maryland's Resident Influenza Tracking System: http://dhmh.maryland.gov/flusurvey

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

Zachary Faigen, MSPH
Biosurveillance Epidemiologist
Office of Preparedness and Response
Maryland Department of Health & Mental Hygiene
300 W. Preston Street, Suite 202
Baltimore, MD 21201
Office: 410-767-6745
Fax: 410-333-5000
Email: Zachary.Faigen@maryland.gov

Anikah H. Salim, MPH, CPH
Biosurveillance Epidemiologist
Office of Preparedness and Response
Maryland Department of Health & Mental Hygiene
300 W. Preston Street, Suite 202
Baltimore, MD 21201
Office: 410-767-2074
Fax: 410-333-5000
Email: Anikah.Salim@maryland.gov

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents

Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

Syndrome	Definition	Category A Condition
Botulism-like	ACUTE condition that may represent exposure to botulinum toxin ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy. ACUTE descending motor paralysis (including muscles of respiration) ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.	Botulism
Hemorrhagic Illness	SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria	VHF
Lymphadenitis	ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)	Plague (Bubonic)
Localized Cutaneous Lesion	SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites EXCLUDES any lesion disseminated over the body or generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease	Anthrax (cutaneous) Tularemia
Gastrointestinal	ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome	Anthrax (gastrointestinal)

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Respiratory	ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media) SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE *acute exacerbation* of chronic illnesses.)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Neurological	ACUTE neurological infection of the central nervous system (CNS) SPECIFIC diagnosis of acute CNS infection such as pneumoccocal meningitis, viral encephailitis ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephailitis NOS, encephalopathy NOS ACUTE non-specific symptoms of CNS infection such as meningismus, delerium EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's	Not applicable
Rash	ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs) SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheaic dermatitis, rosacea EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema	Smallpox
Specific Infection	ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal) INCLUDES septicemia from known bacteria INCLUDES other febrile illnesses such as scarlet fever	Not applicable

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents (continued from previous page)

Syndrome	Definition	Category A Condition
Fever	ACUTE potentially febrile illness of origin not specified INCLUDES fever and septicemia not otherwise specified INCLUDES unspecified viral illness even though unknown if fever is present EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome	Not applicable
Severe Illness or Death potentially due to infectious disease	ACUTE onset of shock or coma from potentially infectious causes EXCLUDES shock from trauma INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths	Not applicable